

S.N. 09/924,926

REMARKS

Claims 1-23 are pending.

Claims 4-5 and 16-17 are objected to.

Claims 1-3, 6-15 and 18-23 are rejected.

The office Action dated July 12, 2005 indicates that claims 1-3, 6-15 and 18-23 are rejected under 35 USC §103 as being unpatentable over Henderson U.S. Patent No. 6,011,595 in view of Golin U.S. Patent No. 5,079,630. This rejection is respectfully traversed.

Claim 1 recites a method of identifying at least one predominant color in a digital image. The method comprises applying a detection rule to randomly-selected pixels in the image. The rule includes testing specific colors among the randomly selected pixels to reduce the probability of at least one of a false-positive outcome and a false-negative outcome.

Henderson discloses a method of segmenting a foreground object from a non-descript background in a digital image (e.g., segmenting a person from a backdrop such as a blue screen).¹ Henderson's method includes measuring the color of the background, and determining a key color range based on the measured background color (col. 5, line 10 to col. 8, line 31; and column 9, lines 6-49). The key color range is used to identify colors that are considered part of the background (and not the foreground). All colors in the key color range are assumed to be part of the background.

Henderson provides a table for indicating the colors that belong to the key color range. The table does not keep track of the number of times that each of these colors occurs in the background. Therefore, the table does not identify a predominant color.

¹ Henderson does not teach image compression, as the office action alleges

S.N. 09/924,926

Henderson offers no teaching or suggestion for identifying those background colors that occur most often. Moreover, Henderson does not hint, teach or remotely suggest a method of identifying a predominant color in the foreground object.

The office action alleges that predominant color identification is illustrated in Figure 9 and described in a passage at column 2, lines 12-35. The citation appears to be incorrect, since the cited passage doesn't describe Figure 9. The passage merely describes problems in segmenting an object from a backdrop. Figure 9 is described from col. 9, line 55 to column 10, line 12. According to Henderson's description of Figure 9, a key color volume is defined and then enlarged to account for shadows. The description of Figure 9 does not teach or suggest identifying the colors that occur most often. The description of Figure 9 does not teach or suggest reducing the error in mislabeling a color as a predominant color.

Thus, Henderson does not teach or suggest identifying at least one predominant color in a digital image, let alone by testing specific colors in the digital image to reduce the probability of a false-positive or false-negative outcome.

The office action alleges that the probability of reducing a false detection of a predominant color is described at column 4, line 52, column 6, line 61, column 7, line 19, and column 2, lines 41-51. Henderson does not support this allegation. These cited passages concern mislabeling a background color as a foreground color. These passages do not concern the identification of the colors

S.N. 09/924,926

that occur most often in a digital image. Henderson attempts to reduce the error of classifying a foreground color as a background color (col. 2, lines 42-48).²

There is no need to address the office action's analysis of Golin, since Golin does not teach or suggest identifying at least one predominant color in a digital image by testing specific colors in the digital image. Therefore, claim 1 and its dependent claims 2-12 should be allowed over the combination of Henderson and Golin.

The remaining claims 13-23 should be allowed for the same reasons.

The office action contains several legal errors. First, it ignores claim limitations. The office action states that claims 6-10 and 18-22 merely recite the creation of a color list. However, claims 7-10 and 19-22 do not "merely" recite creating a color list.³ These claims recite a set of steps that minimize the number of pixels that are tested. The documents made of record do not teach or suggest such creation of a color list. For this additional reason, claims 6-10 and 18-22 should be allowed over the documents made of record.

The office action ignores the following limitation in claim 1: "to reduce the probability of at least one of a false-positive outcome and a false-negative outcome." This feature limits the type of test that is conducted on specific pixels. It describes the type of test that is performed. The documents made of record do not teach or suggest such a test.

Second, the office action inserts claim limitations that are not recited. Claim 1 does not recite a color list. A color list is recited in claims 6-8 and 18-22.

² Thus, Henderson's false positive refers to mistakenly classifying a color in the foreground region as a background color, not mistakenly classifying a color as a predominant color (as the office action alleges with respect to claims 3 and 15)

S.N. 09/924,926

Third, the office action "interprets" the prior art (Henderson). However, the prior art is not supposed to be "interpreted." Claims are interpreted. With respect to claim 1, the examiner is supposed to interpret the feature "testing specific colors among the randomly selected pixels to reduce the probability of at least one of a false-positive outcome and a false-negative outcome" and then determine whether this feature could reasonably cover Henderson's method of determining a key color range. This determination has not yet been made.

Fourth, the office action sets forth motivation for combining Henderson and Golin, but does not find that motivation in the prior art. The office action states that cost reduction and development provide motivation for combining Golin and Henderson. However, neither Henderson nor Golin provides those reasons. Moreover, the office action infers motivation because the two documents cite each other. Aside from being incorrect,⁴ it is irrelevant. See MPEP 2143.01 (fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness).

Withdrawal of the rejections is respectfully requested. The examiner is encouraged to contact the undersigned to resolve any issues that might remain.

³ The office action also contains a technical error. Henderson's so-called list does not contain counters, it only indicates whether a color belongs to a key color range.

⁴ The Henderson patent does not refer to U.S. Patent No. 5,079,630, and U.S. Patent No. 5,079,630 issued several years before the Henderson patent was filed.